Subsequent desirable development was encouraged along that line and the original Metropolitan line through such towns as Rickmansworth, Amersham and Great Missenden by the railways in the first four decades of the last century under the title of 'Metroland', a nickname particularly dear to Betjeman. From Ashendon Junction, north of Prince's Risborough, the G.C.R. swung north to a junction with its original 1899 route at Grendon Underwood, while the G.W.R. went north-west through Bicester to Aynho Junction and Banbury. At Ashendon today's observant traveller between Marylebone and Banbury may still see (where the existing tracks diverge) the remains of the earthworks for the long-gone flyover, similar to the one still in use at the Aynho Junction over the Banbury-Oxford–Paddington line

Under the Railways Act 1921 the Great Central Railway was, with effect from 1st January 1923. grouped with a number of other major companies, including the Great Northern Railway, the Great Eastern, the North Eastern and the North British (which served Scotland) into a large concern under the title of the London and North Eastern Railway, usually abbreviated to L.N.E.R. The railways had made a major contribution to the victory of 1918, having been under government control during the First World War. Owing to the laissez-faire attitude of the powers that be during the preceding century the railway system comprised about a score of major companies and well over a hundred minor ones, in contrast to most European continental countries. Nationalisation had been seriously considered but rejected in favour of four major private companies, the other three being the London, Midland and Scottish Railway (the L.M.S.), the Southern Railway and the Great Western Railway, which alone of the four largely retained its pre-grouping identity, except for the absorption of a number of mainly Welsh smaller companies.

During the Second World War these companies, again under government control, performed herculean tasks, but in 1945 they were totally run-down. With the election of a Labour Government in that year committed to nationalisation, they were taken into public ownership in 1948, the old Great Central lines becoming part of the Eastern Region, although they were later transferred to the London Midland Region. Of the privatisation of the late 1990s the less said the better. The Great Central's London extension did not survive long enough to be sold off.

Following the Beeching report of 1963, in a short-sighted move the main line was closed in September 1966 as a through route north of Calvert.